

Memorandum

To: Wilcox/Lorraine ESI, PA/SI file

Through: ⁹ Hal Cantwell

From: Todd Downham TD 1/23/2013

Date: 7/15/2011

Subject: Changes from Wilcox ESI Sampling and Analysis Plan (SAP) during the sampling event.

The following changes to the Wilcox ESI SAP were necessary based on site conditions during the sampling event on 6/28/11 and 6/29/11:

- Background Surface Soil location (SS-1) was not used as background due to the influence of the former Ohio Refinery located up gradient. Surface Soil sample LWSS-9 collected during the Lorraine ESI (June 2010) was deemed appropriate for comparison with site samples.
- Surface Soil samples SS-7(8), Sediment samples SED-5(6), and 7 were not collected from their original locations because they were located on the Lee property. Access was not granted to the Lee property. As a result of these locations not sampled, a data gap remains. *This is potentially significant since the locations were from a residential yard location, and from areas that drain into perennial waters (Sand Creek).* Samples with the same ID's were collected in alternate locations, not on the Lee property, and based on visible areas of impact.
- Sediment sample SED-8 was not collected due to inhospitable terrain/physical barriers limiting access to the location.
- Sediment samples SED-2, 3, and 4(5) were not collected from their original locations due to inhospitable terrain/physical barriers. These three locations were all located at Probable Point of Entry (PPE) locations, where intermittent surface waters enter Perennial waters (Sand Creek). As a result of these locations not sampled, a data gap remains. *This is potentially significant since data from these locations could indicate a migration of contaminants from the site into Sand Creek.*
- Waste sample W-9 was added based on observation of waste in this location.

pond on the Lee property and into Sand Creek to the south. There are multiple areas of stressed vegetation, barren areas, and visible black tarry waste. East of the tributary is the former crude oil storage area/tank farm. Four residences located on top of or directly next to former tank locations. There are multiple areas of stressed vegetation, barren areas, and visible black tarry waste. A large amount of waste was also observed in several drainage channels near the south property boundary, east of the tributary, southeast of the Lee property, which empty into Sand Creek. It appears that the large storage tank dike was cut and the waste flowed into the drainage channels and possibly into Sand Creek.

Six residences in total on the site, all of which are located on former tank or refinery operations locations. Three of the residences located on the crude oil tank farm portion of the site use water from domestic/private wells. Surface water drainage is towards the tributary, but primarily towards Sand Creek to the south of the site. Another intermittent stream on the eastern-most part of the site and several drainage channels cross the portion of the site east of the railroad, both of which flow into Sand Creek.

Conversations with residents and visual observations indicate that children are living in all six residences on site.